CWMUs BENEFIT HUNTERS, LANDOWNERS & WILDLIFE

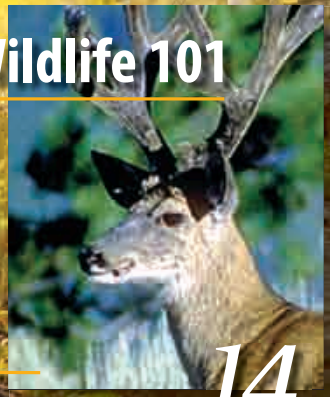
UTAH DIVISION OF WILDLIFE RESOURCES • AUTUMN 2006

# Wildlife REVIEW

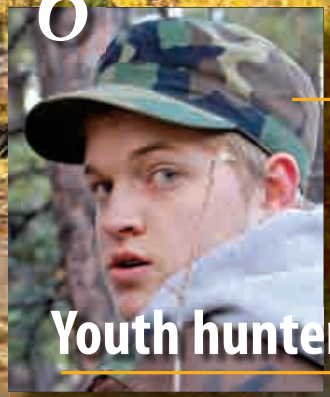
## Bears
*Rehabilitation gives orphaned cubs a chance*

## Urban geese
*Flocks of city slickers are moving in*











# Wildlife Review

Utah Division of Wildlife Resources

Department of Natural Resources Executive Director
Michael R. Styler

Division of Wildlife Resources Director
James F. Karpowitz

Conservation Outreach Section Chief
Larry Dalton

Publications Editor
Christy Merrick

Database Manager/Librarian
Vicki Unander

Media Specialist/Editor
Mark Hadley

Utah Wildlife Review, Vol. XX, Issue 3
Wildlife Review is published quarterly by the Utah Division of Wildlife Resources.



Send comments to:
Editor, Wildlife Resources
P.O. Box 146301
Salt Lake City, Utah 84114-6301
ChristyMerrick@utah.gov


Subscriptions:
Send $10.00 for one year or $25.00 for three years to the above address.

Change of address:
Send old address label, plus new address.




Published & printed in the USA

Cover photo: iStockPhoto, Provo Canyon

Large photo at right: Utah elk, Scott Root

Web site: wildlife.utah.gov


# Inside



2006

# Autumn

# DIRECTOR'S MESSAGE

"Estimates put the annual value to the division of Dedicated Hunter hours somewhere around $1.5 million dollars."

THANK YOU for picking up the autumn issue of *Wildlife Review*. I hope you find it both entertaining and informative.

This issue includes an article by Clint Brunson about our new Walk-In Access program. This new pilot program in northern Utah holds great promise for Utah's hunters. It will provide public access to thousands of acres of private land with excellent populations of turkeys, upland game, fish and other huntable and watchable wildlife. If successful, and I have no doubt that it will be, the program may expand to include large tracts of privately-owned land throughout the state offering prime hunting opportunities. It's innovative new programs like these that will help recruit both young hunters and older hunters who may have given up the sport because of declining opportunities.

Ron Hodson's article about Cooperative Wildlife Management Units chronicles the great success of another UDWR program that began as an experiment in the late 1980s. Thanks to this cooperative program, hundreds of Utah big game hunters have enjoyed outstanding big game hunting opportunities in prime big game hunting areas. It has also created incentives for private landowners who want to manage their lands for wildlife.

I would also draw your attention to Jill West's article about our Dedicated Hunter Program. This is another relatively new program that offers its members expanded

deer hunting opportunities in exchange for a modest fee and a few hours of their time each year. This program has been highly successful, with many benefits for both hunters and the UDWR. Estimates put the annual value to the division of Dedicated Hunter hours somewhere around $1.5 million dollars. That's a lot of donated time and money to do important projects for wildlife that wouldn't otherwise get done.

All these programs are examples of how the UDWR is working for Utah hunters and anglers to provide quality recreational opportunities. I can promise you that we'll keep looking for ways to make your Utah hunting experiences better and better. Best of luck to you this hunting season.

**James F. Karpowitz**
*UDWR Director*

Jim Karpowitz

By Tom Aldrich
*Migratory Bird Coordinator*

# Flocks of city slickers

## Urban geese have moved into Utah's cities and towns.

As Wasatch Front golfers are discovering, Canada geese and their droppings can frequently get in the way of a well-played putt. And the problem only gets worse in the fall, when the goose hunting season cranks into full swing.

But it isn't just golfers who are affected by geese on golf courses. As many Wasatch Front goose hunters are discovering, geese that are so easy to decoy during the first week of the season in October seem to disappear altogether shortly thereafter.

If you happen to be a golfer who also hunts geese, the cause of the problem is no mystery. In response to hunting pressure in rural areas, geese that once avoided towns and cities are now much more likely to seek safety in these urban settings. Golf courses, parks, ponds and even some residential areas have become favorite wintering areas for many of these birds.

Although the move into urban areas is relatively recent, the biological cause of the problem started many years ago.

### A growing problem

If you talk to hunters who hunted waterfowl in the mid-1960s, the opportunity to shoot a Canada goose during the hunting season was rare. In those days of low populations, even seeing a goose made you stop and take note.

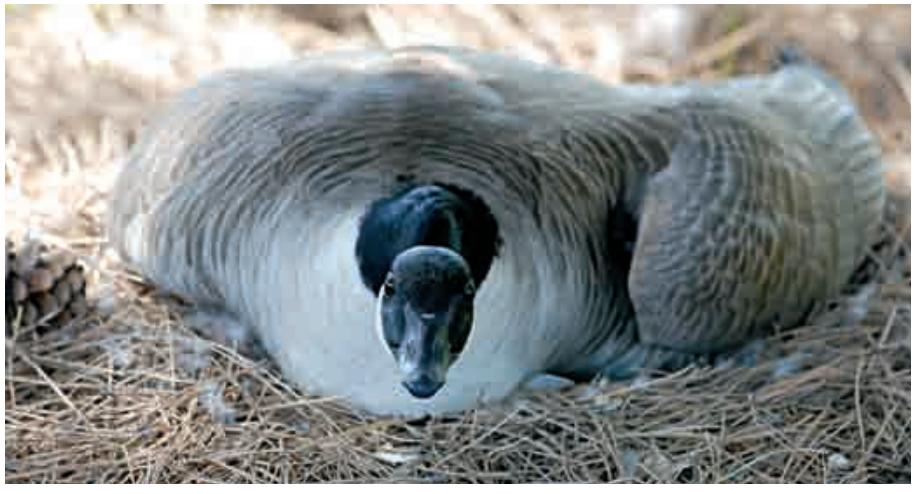
Fewer geese prompted very conservative hunting regulations to allow goose populations to increase in the Intermountain West. Seasons were short (less than 60 days), bag limits were small (in some areas, you could take only one goose) and goose seasons often opened a week after the duck hunt to give these rare birds a chance to "wise up" before hunters could take them. In some years, Utah even issued goose tags to further limit the number of Canada geese that hunters could take.

The strategy worked, and the response was dramatic. Five to six times more geese are wintering in Utah now than were wintering in the state 40 years ago.

### Urban living

But while goose populations have expanded in both numbers and distribution, Utah's goose hunting regulations have remained relatively conservative. Although bag and season lengths on geese have been gradually increased to the maximum allowed by federal regulations, banding data suggest the state is still experiencing harvest rates that are lower than they were a couple of decades ago (a smaller proportion of the population is taken each year).

Warming climates in Utah, combined with deteriorating habitat conditions in Arizona and southern California where many of the state's geese used to winter, probably also have contributed to the growing number of geese that remain in Utah throughout the year.



TOM ALDRICH

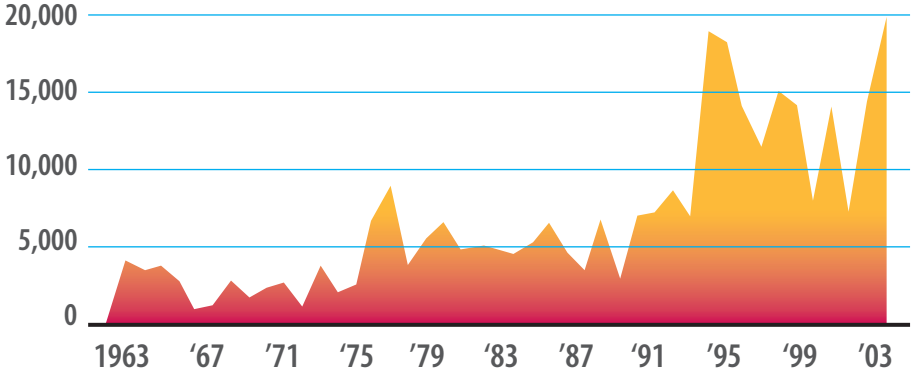
**Parks and golf courses provide sanctuary to increasing numbers of geese.**

TOM ALDRICH

**To the dismay of golfers, geese are taking up residence on Utah golf courses.**

## Canada geese in Utah

Mid-winter populations




In addition, the development of urban lakes and large grassy areas inside city limits has created sanctuaries that geese are willing to exploit. In some cases, adult geese are staying inside city limits year-round, and they're teaching their young to do the same. Because young geese typically return to nest in the areas where they were raised, the problem grows rapidly once urban nesting becomes established.

These urban families also serve as "decoy flocks" each fall, attracting geese to urban areas that may otherwise have used more natural areas during that time of the year.

As a result, in some years more geese are wintering inside city limits in Utah than outside city limits. For example, in January 2006, more than 6,100 geese were counted in Salt Lake and Davis counties. A total of 4,800 of those geese (more than 78 percent) were inside city limits.

The tolerance people have for geese in these urban settings is dwindling. Not only do the birds create a nuisance, but human health and safety issues also can arise when goose populations increase, especially near airports.

And the situation in Utah is not unique. Urban communities across the nation have witnessed similar Canada goose problems. In fact, this national issue recently prompted the U.S. Fish and Wildlife Service to develop an Environmental Impact Statement that allows new control measures to be implemented for resident populations of Canada geese in some areas of the country.

### Dealing with the problem

In an effort to address the increasing urban problems, and the declining number of geese taken by hunters in Utah, in 2005 the Division of Wildlife Resources proposed moving the goose hunting season dates into late January. This is when many geese leave urban areas and return to nesting areas where hunters have a chance to take them.

The urge to leave the urban areas is driven in part by the increasing length of day in mid-January. It's also driven by hormonal changes in the geese that naturally prompt them to return to the areas

where they were hatched to begin their annual nesting effort. The mid-January thaw also provides access to nutritious and natural new food sources in the marsh. Geese crave these food sources as they prepare for breeding.

The UDWR estimated that this redistribution process would strengthen in late January, and that a late goose hunting season could increase the number of geese taken by hunters by as much as 15 percent. The higher mortality should help curb, and possibly reverse, the growth of goose populations, thereby reducing the problems with geese in urban areas.

Unfortunately, to hunt into late January, the opening of the goose season either had to be delayed, or two weeks needed to be taken out of the middle of the existing season. This is because a federal regulation limits Utah to a 107-day goose hunting season, and the state currently takes all of the days allowed.

Although there was overwhelming public support for moving the season into late January, there were tremendous differences of opinion on when to take the closure. I believe more debate took place on this issue than any other issue in my 20 years of making waterfowl recommendations for the UDWR.

After detailed analysis of harvest data, the UDWR recommended that the season close for two weeks in early December. By then most of the marshes are frozen and many hunters have quit hunting waterfowl for the season. By closing the season at that time, we would affect the fewest number of hunters and provide great goose hunting opportunities in late January for those who were willing to brave the colder conditions.

In August 2005, the Utah Wildlife Board formally adopted the UDWR's plan to split the hunting season for Canada geese in Utah and the season was closed for two weeks in early December.

## Next steps

For 2006, the UDWR is proposing a separate goose zone for northern Utah. This separate zone would allow season dates to be varied to accommodate regional differences in hunter preference and biological differences in goose population dynamics. Please see the UDWR Web site at *wildlife.utah.gov/news* for updated information about the proposal. The Wildlife Board is scheduled to make a decision on August 17.

Although increasing Canada goose harvest rates is our primary strategy to deal with growing populations, geese are adaptive animals and additional tools are needed to solve problems in urban areas. The UDWR will start an experiment in fall 2006 to evaluate the effectiveness of relocating young geese hatched in urban environments to state waterfowl management areas where broods of wild-reared young might teach them new habits.

If you're a golfer, we hope these efforts will help improve your putting and lower your score. And if you're a hunter, we hope the enhanced hunting opportunity will bring more geese into your decoys and more meat into your freezer.

Fore!

By Bill Bates
*Southeastern Region Wildlife Manager*

# Youth hunters

## Kids are the future of wildlife conservation.

THE STARS sparkled brightly in the moonless sky as the trio began the steep climb. The two boys didn't notice, though. Their eyes were focused on the trail as they followed their father through the ponderosa pine forest.

At the top of the hill they paused in the brisk air to catch their breath.

"What was that?" Andrew asked, turning his head to the right.

"Was that a turkey?" Jimmy asked.

Suddenly the forest was filled with a chorus of gobbles, coming from several directions.

"I'd say more than one," their father answered.

Quietly they moved closer to the intermittent calls. Soon, a small meadow opened up in front of them. They quickly set up their decoys, a jake and a hen, and took cover behind several nearby trees.

*Cluck, cluck, cluck, cluck.* Jimmy flinched when his dad pushed the small dowel on the wooden turkey box call.

*Gobble, gobble, gobble, gobble.* The eerie response was immediate.

The moments passed, and Jimmy sat and waited. The anticipation built, and Jimmy could hear his heart pound. It seemed to skip a beat when he heard his twin brother move, but he choked back the urge to say anything. They were in camouflage, hiding and waiting. Waiting for the sun.

A flutter of feathers and the toms gobbled again, but this time the gobbling wasn't so loud. The birds were on the ground. Jimmy held tight. It seemed an eternity, but just as it was getting light, he saw two heads bobbing above the small shrubs in front of them.

"They're headed to the decoys," Jimmy whispered.

"Can you make out what they are?" his dad asked.

Jimmy shook his head 'yes' and leaned farther around the tree, while his father and brother braced for the shot that was sure to pierce the morning silence.

But the shot did not come, and soon Andrew threw a pinecone at his dad to get his attention.

"I just saw three toms go that way," he said, pointing up the hill.

"Why didn't you shoot?" Jimmy's father questioned, turning to his other son.

"I never saw a beard," came the quick answer.

"Well, I'd have to say you made the right choice," his father responded, rubbing the stubble on his chin. "You should never shoot until you are sure of your target. We'll see them again. I'm proud of you for waiting."

As you might have guessed, this was Jimmy's first turkey hunt. At 16, he was fortunate to draw a permit. Chances are that he would not have drawn a permit if the Utah Wildlife Board had not taken actions to provide hunting opportunities for those younger than 18 years old.

**The state's youth represent the future of hunting and wildlife conservation.**

PHOTOS BY BILL BATES

**Nearly nine out of 10 hunters have their first hunting experience before the age of 15. In today's world, competition for our youth's time and interest is intense. With the goal of building the foundation of a lifelong interest in wildlife, the UDWR has implemented several youth-oriented hunting programs and incentives.**

## Getting kids hooked

Recently, a committee was asked to determine why Utah was having a difficult time recruiting and retaining young hunters. The committee found that 89 percent of all hunters had their first hunting experience before the age of 18. And 85 percent of hunters took their first hunting trip with a family member. The committee also found that the likelihood of someone taking up hunting was greatly reduced if they had not hunted by the time they were 18.

In a day and age of many competing activities ranging from baseball to X-Box, members of the Utah Wildlife Board felt it was important to give young hunters a chance to have a positive hunting experience. Providing young hunters with this type of experience is imperative if funding for wildlife management is to be preserved in the future, since more than 90 percent of the funds to manage wildlife comes from hunters and anglers.

## Improving kids' odds

Why should youth hunters be given improved odds at drawing a permit? One of the most common reasons for not hunting the committee found was the inability to draw a permit.

"The Utah Wildlife Board has taken actions to make it easier for youth hunters to draw permits," says Judi Tutorow, wildlife licensing coordinator for the Division of Wildlife Resources. "Fifteen percent of general season buck deer permits and wild turkey permits and 20 percent of antlerless permits are set aside for hunters under the age of 18.

"Youth hunters are drawn first during these drawings. Youth that do not draw out are then re-entered into the main drawing. This increases their chances at drawing a permit."

Tutorow says that in 2006, a total of 5,372 youth hunters took advantage of this opportunity and drew a general season buck permit.

"The important thing for youth hunters to remember is that they must apply separately to be eligible for a youth permit," she said. "Those who apply as a group cannot draw a youth permit."

Buck deer hunters under the age of 18 who draw a permit for either the muzzleloader or any-weapon season can hunt all three seasons for the different weapon types, including archery. These permits are good only for the region indicated on the permit. Just like all of the other hunters in the state, youth hunters also can purchase a statewide archery buck deer permit and hunt in any open unit in the state, but they can hunt only during the archery season.

## Elk hunting

An additional opportunity for young big game hunters is the youth general any bull elk hunt. In 2006, 300 lucky youth hunters drew a youth general any bull elk permit. These permits are valid on any open any-bull or spike-bull-only unit. Hunters can take a branch-antlered bull on an any bull unit, while only spike bulls may be taken on a spike-only unit.

"This is a great permit," says Craig McLaughlin, big game coordinator for the UDWR. "The hunt is scheduled during the peak of the rut, when bulls will respond to a bugle call. Also, with the restricted number of permits, there is less competition from other hunters.

"Hunters can first apply for and hunt big game during the calendar year in which they turn 14," he added. "The opportunity to hunt all three deer seasons, draw an antlerless permit or obtain a youth any bull permit provides hunters under the age of 18 quality hunting experiences, which should give young hunters a very good chance of being successful."

> "YOUTH HUNTERS ARE THE FUTURE OF WILDLIFE CONSERVATION HERE IN UTAH, AND THROUGHOUT THE NATION."

## Waterfowl hunting

One of the first hunts designed to recruit young hunters was the Youth Waterfowl Hunt.

"The U.S. Fish and Wildlife Service encourages states to provide youth hunting programs," says Tom Aldrich, migratory game bird coordinator for the UDWR. "In Utah, we offer hunters under 16 years of age one day to hunt on the Saturday prior to the opening of the general waterfowl season. This provides them an excellent opportunity, because there are more birds present, since the fall migration hasn't started and the birds are easier to hunt."

Aldrich says the program has provided many benefits.

"The percentage of hunters from 12 to 16 years old that hunt waterfowl dropped from 15 percent to five percent prior to initiation of the program," he says. "The Youth Waterfowl Hunt helps us recruit hunters, and helps them become better hunters. We require an adult to accompany all youth that participate. These mentors teach bird identification and instill good hunting ethics.

"Each year we get about 800 kids on the division's waterfowl management areas. In addition, several hundred others hunt on private waterfowl clubs."

To become involved, young hunters must purchase a small game license and register with the federal Migratory Bird Harvest Information Program (HIP). They do not need a federal waterfowl stamp.

The Utah Waterfowl Association is willing to provide mentors to interested youth that may not have a parent or other experienced adult to hunt with them on the Youth Waterfowl Hunt.

"The Youth Waterfowl Hunt has been very successful," Aldrich says. "Over 70 percent of the hunters surveyed felt it was a great opportunity for youth hunters.

"Initially, we heard some concerns that the program may impact hunter success on opening day. However, bag check has shown that not to be the case," he says. "While youth hunters have averaged two birds each, the bag check on opening day, at 1.5 birds per hunter, has not changed from the long-term average."

## Upland game hunting

The UDWR's upland game program also has been very creative in providing opportunities to young hunters.

"We here in the upland game program have long recognized the need to recruit young hunters," says Dean Mitchell, upland game coordinator for the UDWR. "We have two hunts specifically for youth hunters: the youth pheasant hunt and the new—statewide this year—youth chukar hunt.

"For a young hunter to participate, he or she must first purchase a small game license," Mitchell said. "This year, the Utah legislature has changed the minimum age for purchasing a small game license. Now, any hunter who successfully passes hunter education is eligible, regardless of age."

"After purchasing a permit, those under the age of 18 must fill out an application, which can be found in the Utah Upland Game Hunting Guide or online at *wildlife.utah.gov/uplandgame*. Applicants must write a short essay on: 'I want to continue the Utah upland game hunting tradition because…' or 'I would like to start my own upland hunting tradition because…'

"There are five youth pheasant hunts, and new this year, five youth chukar hunts. Last year, we tried out a youth chukar hunt for the first time. It worked out great, so we decided to expand it across the state. This year, 395 youth pheasant hunters and 210 youth chukar hunters will be selected to participate in the youth hunts. Each youth hunter will need to be accompanied by an adult. Accompanied means that the adult must be within a distance where they can see and verbally communicate with the youth hunter."

PHILL DOUGLASS

**The UDWR is actively trying to bring more young hunters into the sport.**

## The future of conservation

Surprisingly, there are many parents who do not hunt in Utah but who may let, or even encourage, their children to hunt. The youth hunter recruitment survey revealed that 74 percent of non-hunters would allow their children to hunt.

Susan Burke, a non-hunting mother of two sons and a daughter, ages 10, 12 and 13, was asked if she would allow her children to hunt.

"If they were interested and passed hunter safety, I would support them," she said. "I think it would be great."

Burke said her sons have always wanted to hunt.

"I do not know of any young boy who does not want to hunt, shoot a gun and be in the outdoors. But," she added, "I would like any program they are involved in to be well organized, emphasize safety and teach respect for nature. I would like them to understand that hunting is a tool used to obtain food and for wildlife conservation, not just an activity to be destructive of nature."

Dean Mitchell echoed those sentiments.

"Youth hunters are the future of wildlife conservation here in Utah, and throughout the nation," he said. "What we are trying to do with these programs is to expose them to the principles of wildlife conservation and hunting ethics.

"These hunts are a lot of fun, but, more importantly, they are a hands-on way for young people to learn about wildlife conservation. The future of wildlife is in their hands. We hope to secure a bright future for wildlife through the youth hunting programs."

**Opening morning provided plenty of opportunities for Kevin Gerhardt to harvest this turkey on a walk-in access area in Cache County.**

By Clint Brunson
*Walk-In Access Manager*

# Walk-in access

## A new program is opening thousands of acres of private land to public hunting.

AS ANY HUNTER knows, wildlife does not respect property lines. And some of Utah's best wildlife habitat is on private lands. A new program called the Walk-In Access (WIA) program will give sportsmen access to some of this prime hunting and fishing. At the same time, it'll help landowners better protect and manage their property, and it'll help the division better manage wildlife. It's a program that has the potential for big benefits for people and wildlife, but sportsmen bear the burden of responsibility for making it work.

### How the program works

The WIA program is a three-year pilot program in Box Elder, Cache, Davis, Morgan, Rich, Summit and Weber counties in northern Utah. Other states, including Idaho, Montana, Wyoming, Colorado, Nebraska, Kansas, North Dakota and South Dakota, have very successful WIA programs that are used by thousands of sportsmen, including nonresident sportsmen, every year.

The WIA program compensates landowners for providing access for the public to hunt, fish or trap on their lands. Landowners also receive conservation officer patrols and liability protection while still being able to work their land.

Landowners are able to designate parking, registration and access sites that must be used by sportsmen who access their property.

UDWR biologists evaluate each property to ensure it has good wildlife habitat and that wildlife are present on the property during the hunting seasons. After the property has been evaluated, the landowner and the UDWR biologist sign either a one-, two- or three-year contract.

Travel on WIA areas is usually restricted to foot travel only, but some landowners do allow horses or four-wheel-drive vehicles on established roads or trails. The landowner's contract lists the species that are available to hunt, the time access is allowed and whether sportsmen need to sign in and out or personally contact the landowner before entering the property.

Landowners can specify several different ways that sportsmen can gain access to their property.

One option is for landowners to allow anyone on their property without requiring them to sign in or out.

Or, a landowner may require all users to sign in and out before entering and leaving the property. Requiring all users to sign in and out provides valuable

**Angler Dave Clegg fishes a Blue Ribbon stretch of the Weber River.**

information that the UDWR can use to evaluate the success of the program, provides landowners a list of those using the property and gives conservation officers information on who has complied with the requirements set forth by the landowner.

A final option available to landowners is to require all users to personally contact them before entering the property. Compliance with these requirements is a very important part of the program.

## Finding walk-in areas

How do you find the WIA areas near you? It's easy. Just go online to *wildlife.utah.gov/walkinaccess*, click on "Participating Properties" and view "Properties Enrolled in the Program."

A map will appear that shows the borders of property you're allowed to hunt, fish, or trap on; rules that apply to that property and any special requirements that the landowner has for sportsmen (for example, the requirement to sign in and out or call ahead for access).

Sportsmen can print these maps off the Web site or they can go to a UDWR office and have UDWR staff print it for them.

A paperback atlas that includes all of the maps and rules for each WIA area will be available in the future. It's very important that sportsmen follow the rules for the properties they visit.

"The sportsmen have to respect the landowners and their property in order for this program to work," says Arthur Douglas, who is a landowner and the president of the Utah Farmers Union.

The rules may vary at each location, so it's important that hunters, anglers and trappers learn the rules for the areas they visit.

## Early success

In spring 2005, turkey hunters became the first sportsmen in Utah to try the program out, and they found great success.

On the opening morning of the hunt, one hunter watched 130 turkeys approach his location. He had watched the birds roost and was in the right spot the next morning as they flew down and made their way toward him. He said it was awesome just to be there and watch it all happen.

After setting in ambush, another hunter had four toms lined up in a single-file line. He had to wait until one broke off from the group before he could shoot. He had seen and watched many birds, but he knew this tom was the one he wanted. It had a 12.5-inch beard and great spurs.

At registration sites, turkey hunters signed in (a requirement at these areas) and left gracious comments for the UDWR and the landowners.

One hunter called before the season and asked why an area he had permission to hunt had been posted as a WIA area. I told him about the program and about other nearby areas in his hunting unit that were also enrolled in the program. After scouting these additional areas, he killed a tom on one of the new areas and was very excited that he had additional areas to hunt.

The Walk-In Access program has created great opportunities for both sportsmen and landowners in Utah. As more landowners enroll, and more hunters, anglers and trappers become aware of the program, I hope everyone will do their best to make the program a success.

By Tom Aldrich
*Migratory Game Bird Coordinator*

Fire extinguishers and fire-retardant clothing are recommended.

# Colusa duck

THIS RECIPE was developed in the rice-growing community of Colusa, California, in the 1970s, when pintail and mallard hunting on the Colusa, Sutter and Yolo flood by-passes was unquestionably some of the best hunting in North America. The hunting—and the food it produced—provided sustenance to a group of struggling college students pursuing their careers in waterfowl biology.

Unauthorized knock-offs include "Nevada Duck" and "Sam's Duck," both of which are counterfeit recipes developed by two shady characters and former hunting associates of Chef Aldrich.

**Ingredients:**

- 10 pounds of wild duck, plucked
- 4 tablespoons each paprika, salt, pepper
- 1 bottle Worchestershire sauce

**Sauce:**

- 1 cube butter
- 1 12-ounce jar red currant jelly
- 1 cup ketchup
- 1 tablespoon Worchestershire sauce

This recipe requires about 10 lbs of whole wild duck, plucked (preferably mallard, pintail, green-winged teal, with abundant white subcutaneous fat). If you use fewer ducks or leaner ducks you will not get the flames required to generate the signature "fireball" of the Colusa duck.

You also need to use a high-quality, steel, kettle-type charcoal grill with functioning air baffles and sealable lid to adequately control combustion rates and temperature. I use a Weber grill, which will last up to three years before disintegrating. Aluminum, aluminum alloy, or other low-temperature metal grills will not work and may melt or slump when the grill hits the flash point during the first stage of cooking. Propane grills also are not recommended as the cooking system could create a safety problem should you lose control of the flame.

You also need to be sure there is adequate room around the grill to avoid igniting adjacent combustible materials and to provide you with an escape route. I recommend at least 10 feet to each side of the grill and 20 feet above the grill as a minimum safety perimeter. A water hose nearby also is a good idea.

To prepare, rinse ducks and pat dry. Combine paprika, salt and pepper; add enough Worchestershire to create a thick mud-like consistency. Rub the "mud" into the skin over the entire duck—use plenty.

Light approximately five pounds of good-quality (such as Kingsford) charcoal, and spread evenly across the grill bottom once all the briquettes are ignited. You want the charcoal extremely hot for cooking rather than waiting for it to ash over.

Place the ducks breast side down, evenly spaced across the grill, with all air baffles wide open. Do not cover.

Allow several minutes for the fat to begin dripping and allow the flames to engulf the ducks. Place the cover over the grill and wait for the kettle to pressurize. Once you obtain thick grayish-white smoke howling from the vents and lid seam (a couple of minutes), at arms length carefully but quickly lift the lid from the grill.

The mushroom-shaped cloud of smoke released from the grill should now detonate if you have done everything correctly. Using long-handled metal grill tongs, reach into the inferno and turn the ducks onto their backs and re-cover the grill. It's best to have two people turning ducks to minimize the singed hair and skin you will endure during this step.

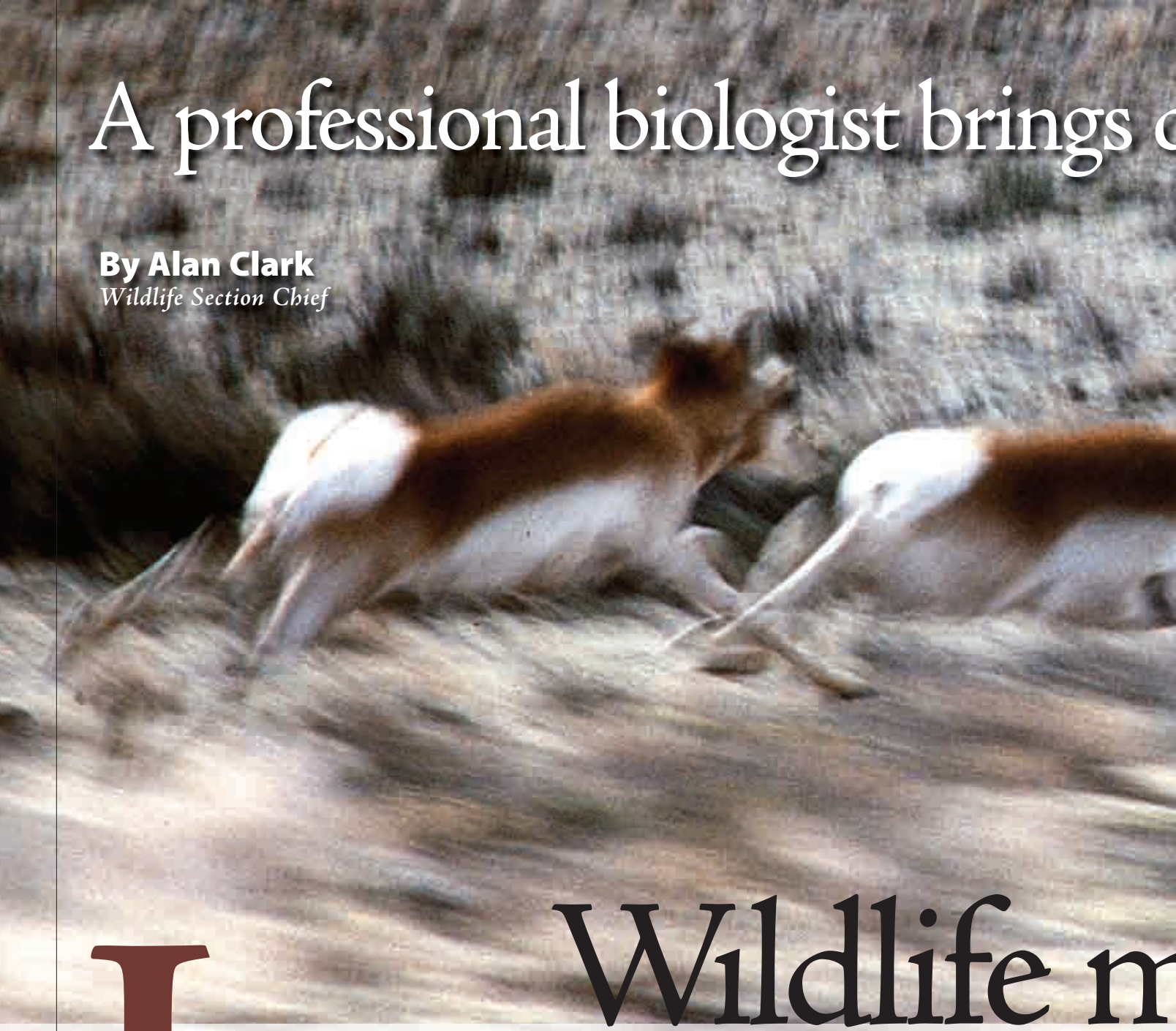
Cook for approximately 20 minutes until medium rare. The skin should be lightly charred. Pour some of the liquid from the duck cavity to check for doneness. Liquid should be pink to mostly clear. If it is red, continue cooking.

As ducks are carved, pass the cut meat through the gathered juices. Mix and heat sauce ingredients and pour over carved meat.

Best served with Cabernet Sauvignon or Merlot, rice and stir-fried vegetables.

# A professional biologist brings c

**By Alan Clark**
*Wildlife Section Chief*



# Wildlife m

I'VE BEEN a wildlife biologist for more than 30 years, and now my daughter is studying to be one too. She often asks me questions about why we hunt certain species the way we do. I'm frequently asked the same questions when I meet with people at events around the state or when I speak to a wildlife class at a university.

These interactions have helped me realize that people who are not directly involved in managing wildlife have many questions and assumptions about why we manage wildlife the way we do. I thought it would be interesting to address a few of these questions in this issue of *Wildlife Review*.

## Why do we have separate hunts for buck and antlerless deer?

Management recommendations for Utah's mule deer are directed by the objectives in the Mule Deer Management Plan. The plan sets a population (quantity) objective for a total of 412,000 deer statewide by 2011. The plan also outlines a buck-to-doe ratio (quality) objective that guides the number of bucks (males) verses does (females, or antlerless deer). In most areas of the state, we're managing the herds so the ratio of bucks to does is a minimum of 15 bucks per 100 does when the hunting seasons end in the fall.

To achieve those objectives, there

PHOTO © JAMES KIRK GARDNER

clarity to an often blurry picture.

# management 101

are two types of deer hunts each year. The Utah Wildlife Board, with recommendations from division biologists, sets the number of permits for each of these hunts each year.

The buck-hunting season helps achieve the desired buck-to-doe ratio, while the antlerless hunt moves the deer herds toward the total population objective. The reason two hunts are needed is tied to deer biology.

Bucks typically make up less than 15 percent of the total population. Since only five bucks per 100 does are needed to successfully breed all of the 100 does, the number of bucks in a population has little effect on the number of fawns born the next year. Even if half of the bucks in a population were harvested, for example, the total population would only be reduced by five to 10 percent.

So even when a total deer population is below objective, and we want that population to grow, we can continue to provide hunting opportunity for the "surplus" bucks in the population with little effect on the growth of the deer herd. For this reason, the buck-hunting season helps us adjust the buck-to-doe ratio, but does not have a major impact on the total population.

The antlerless hunt produces a different result. When a doe is taken, both the doe and the fawns she would have had in the future are removed from the population, which has a much bigger

LYNN CHAMBERLAIN

**Elk population objectives tend to be lower than those for mule deer due to the larger forage requirements for elk.**

effect on the total population. For this reason, antlerless hunts are designed to get the total population to our objective.

### Why is the ratio of males to females in an elk population so important?

Elk populations are also managed with quantity and quality objectives, but maintaining the proper ratio of males to females is even more critical because of the unique characteristics of elk.

Since elk are larger and consume more forage than deer, habitats can't support as many elk as they can support deer. Therefore, elk population objectives tend to be much lower than they are for deer. Also, on many management units we want bull elk to grow much older than buck deer because hunters prefer more mature bull elk. Meeting the lower population objectives, and keeping the harvest of bull elk at a level that's low enough to help bulls reach a mature age, can easily result in a large proportion of bulls in the population.

For this reason, a large number of antlerless animals must be harvested to meet our population objective, and that means mostly cows will be taken.

Taking cows has two effects. First, we end up with fewer cows in the population, and that means fewer calves will be born. Also, because we end up with a lot of bulls, more of the older bulls will be of lower quality and more of the bulls will have antlers that are damaged from fighting with other bulls. Hunters with a coveted limited entry permit don't want to take either of these types of bulls.

In many of Utah's limited entry elk units, the bull-to-cow ratios range from 50 to 80 bulls per 100 cows and sometimes even higher. Here's a simplified example of how this happens:

If we have an elk unit with a population objective of 1,000 elk and an age objective of bulls that average 5 years of age, only three to four bulls per 100 elk can be harvested each year to maintain the age objective. The elk herd, however, is producing 30 calves per 100 elk each year, 15 of which are bulls and almost all of which will survive.

At the end of one year, the elk population of 1,000 animals will have grown to 1,260 (1,000 starting population, plus 300 calves produced, minus 40 bulls harvested). To get back to the population objective, 260 elk need to be harvested, and most of them will be cows. If this is done for a number of years, the elk herd will shift more and more to bulls. There will be fewer cows in the population and fewer calves will be born.

Eventually, we will have too few cows left to produce enough calves to maintain the population. When that happens, we'll need to restart the elk herd by harvesting a lot of bulls and

replacing them with cows. Without some additional management, we will have a population with little stability and with population numbers that fluctuate greatly.

A good solution to this is spike-bull (yearling male) hunting, which is used on the larger management units in the state and may soon be added to some of the smaller limited entry units.

The benefit of spike-bull hunting is that bulls are removed that would have grown to an older age. On spike-bull units, hunters can only harvest a bull with a spike antler on at least one side. Most of these bulls are yearlings, but even with a high harvest, 15 percent of the spikes survive. Also, some yearlings already have two points and are not legal to harvest during the spike hunt. The remaining bulls are then protected until they reach the quality hunters want to harvest.

Spike-bull hunts allow us to harvest three or four mature bulls per 100 elk in the population and still maintain our quality objective. We still hold antlerless hunts to meet the population objective, but since we removed part of the population as surplus bulls, the harvest of cows is much lower and we can maintain a productive herd. This is the same idea as thinning your carrots when they're young so more of the remaining carrots can grow to the size you want to harvest.

Some call this management tool "catch-and-release elk hunting" since the spike-bull hunters have the pleasure of seeing the big bulls during their hunt but cannot take them home.

## Why are we hunting so many buck pronghorn on Parker Mountain?

The Parker Mountain antelope herd is a good example of what happens when we let a big game population get above the population objective and have to play catch-up to bring it back.

Because of high-quality habitat on the unit, even during the recent drought the Parker Mountain antelope herd was extremely productive. While many antelope herds dropped to fewer than 10 fawns per 100 does during the drought, the Parker Mountain herd continued to produce 50 to 60 fawns per 100 does.

**Bucks typically make up less than 15 percent of the total deer population.**

The antelope herd grew to an estimated 3,500 animals when our objective was 1,500.

How do we manage this herd to get us back to the objective? We chose to use surplus doe antelope from the unit to restock other units that had low populations because of the drought and to trade with other states for big game animals that Utah needed. When we transplant animals to supplement an existing herd or start a new one, we focus mostly on catching does that will produce fawns.

Capturing antelope is expensive, and only a few males are needed in a population, so over the past two years we've removed mostly females and fawns for transplant. Doing so has moved the herd closer to the population objective, but it also has left us with a high ratio of bucks to does. We've issued large numbers of buck tags to bring the herd closer to its population objective, but more importantly, to balance the ratio of males to females to provide a herd that's lower in number but more productive. After several years of expensive counts and intensive hunting and management, the herd will be brought back to its objective.

## Why do we hunt turkeys in the spring?

Game bird species, such as grouse, quail, waterfowl and pheasants, have characteristics that are different from big game. With species that pair to produce and raise offspring, saving females at the expense of males would not gain anything since an equal number of both males and females are needed. Also, many species of game birds cannot easily be distinguished by sex (chukars and grouse, for example).

But turkeys provide an interesting example where, in conjunction with surplus males, behavioral differences between males and females are used to provide a unique opportunity for hunters.

Unlike many other game bird species, male turkeys gather a harem and breed many females, so there are surplus males in the population. The male turkey's behavior of displaying and gobbling makes it easy for even novice hunters to distinguish males, even though their plumage is similar to females'. Even after the hens are bred, the tom turkey will continue to display its unique behavior in the spring. Because of this behavior, we can provide spring turkey hunting with little effect on population growth, including the growth of populations that recently have been introduced to an area.

Fall hunts will be implemented in Utah once we reach our population objectives and want to control total population numbers.

I hope this article has helped take some of the mystery out of wildlife management. If you already have a good understanding of how wildlife populations are managed, you know that I have simplified the process. But I hope I've helped the novices understand the basic principles. If you think this article would form a good beginning to a series exploring other fish and wildlife management principles, please let us know.

By Ron Hodson
*CWMU Coordinator*

# CWMUs

## Cooperative Wildlife Management Units benefit landowners, hunters and wildlife.

WHEN Gil Conover spends time on his family's private ranch in Nine Mile Canyon, he almost always encounters a herd of elk. In the fall he can be assured of hearing the eerie bugling of bull elk, which echoes from the steep canyon walls as each bull attempts to announce his superiority to the other bulls.

These experiences make Conover smile, but that wasn't always the case.

Private lands pose a unique challenge in wildlife management. Rick Danvir, wildlife manager at Deseret Land and Livestock, refers to the relationship as the "Perverse Triangle." The three sides of the triangle are made up of private landowners, the people of the state of Utah and the Division of Wildlife Resources.

Each has separate goals and interests. The landowners own much of the habitat that the state's wildlife depend on, and control access to that land, but they don't own the wildlife. The people of the state of Utah own the wildlife, but they don't own the private land. The UDWR does not own the land or the wildlife, but the agency is responsible for managing the state's wildlife for the public.

Because no side of the triangle has all of the elements necessary to help wildlife thrive, cooperation among all three sides is the only way that the state's wildlife can be managed effectively.

This challenge led to the creation of Utah's Cooperative Wildlife Management Unit (CWMU) program.

### Benefits for landowners, wildlife

The CWMU program allows a landowner or group of landowners to form a special hunting unit for deer, elk, pronghorn, moose or turkey. Similar to the state's limited entry hunting units, CWMUs are open only to those who possess a hunting permit for that CWMU unit.

A percentage of the permits for each CWMU unit are available to the public in the state's big game drawings. Hunters who draw these permits are given access to private lands that they probably wouldn't be able to obtain access to otherwise. In return, the landowners receive a percentage of the tags that they can use themselves. The landowners also can choose to sell their tags. Allowing landowners to sell tags provides them with a financial incentive to foster healthy big game herds.

This incentive has worked wonders. Before the CWMU program came into existence, UDWR biologists commonly heard private landowners complain, "Get all of your big game off my property!" That attitude was understandable since landowners received no financial benefit from wildlife, and big game animals competed with their livestock for forage.

The situation has changed dramatically since the CWMU program began and property owners started reaping the rewards of fostering habitat for big game animals. Now, instead of wanting all of the deer and elk removed, landowners in the CWMU program want the herds to grow. In fact, UDWR biologists sometimes have to restrain landowners from growing populations that are too large for the available range.

### Sportsmen benefit too

Sportsmen also benefit from the arrangement.

Larger big game populations mean more animals for sportsmen who hunt on public lands that are adjacent to the private CWMUs. For example, bull elk that were tagged by UDWR biologists on one northern Utah CWMU were later harvested on public land in a nearby area. Some of these harvest locations were up to 40 miles away from the CWMU.

Another benefit is the access hunters gain to private properties. In 2006, more than 4,650 permits were available for CWMU lands. More than one-third of those permits (35 percent) were available to public sportsmen through the state's big game drawings.

Many people think back to the 1960s and 1970s when access to hunt private lands could be gained either for free or for a small charge. They incorrectly assume that the CWMU program has taken away the opportunity for them to hunt on these private lands for free.

The truth is that times have changed, and free hunting on private lands is now about as common as a confirmed Bigfoot sighting. In reality,

**Heavy equipment is used to thin pinyon and juniper trees at the Double Cone CWMU in northwestern Box Elder County.**

without the program, there would be almost no chance for a public sportsman to bag a deer, elk or moose on these private areas without paying the landowner a substantial fee.

## Habitat is key

Each year, more of the areas that big game animals depend on to make it through the winter are being turned into housing developments and cabin lots. When these lands are developed, animal populations often can't shift to other locations because other animals already live there. The unfortunate result is a decline in big game populations.

The CWMU program provides landowners with a financial incentive to keep their property as open space. While most landowners do not get wealthy from selling their portion of the CWMU tags, they can make enough money to supplement their livestock operations. That money encourages them to keep their land, rather than selling it to a developer.

CWMU landowners also are recognizing that good habitat offers many benefits. In addition to healthy wildlife populations, their livestock operations can improve when their range is managed wisely.

In Utah, a group known as Quality Resource Management has formed with the goal of improving habitat on private lands. The group is forming chapters across the state. These chapters are open to all private landowners, but they were started because CWMU landowners recognized the value of pooling their resources to improve conditions for big game animals. In the past 10 years, private landowners have improved thousands of acres of wildlife habitat on their lands in Utah.

## A conservation community

In addition to improving their lands for wildlife, CWMU operators strive to be good citizens of the conservation community in other ways too.

Not long ago, a UDWR biologist received a call from a woman who had been stricken with a severe lung disease for several years. The disease kept her tethered to oxygen and mostly homebound as she awaited a lung transplant.

In spite of her challenges, she was determined to show her young family that life should be experienced fully. She decided to go big game hunting, which was something she had never done before. She had completed a hunter safety course, but her disease forced her to remain within 20 feet of a vehicle. She was unsure where she could go hunting and have some expectation of success.

When one of the CWMU operators learned of her situation, he immediately donated a CWMU tag to the eager new hunter. She and her family experienced a wonderful day afield that culminated with her bagging her first pronghorn with a single, well-placed shot.

**Although bighorn sheep are native to Utah, their successful reintroduction involved transplanting animals from other western states. The DWR has had great success in re-establishing thriving populations of big game animals in appropriate habitats. Today, the DWR continues this successful program.**

By Craig McLaughlin
*Big Game Coordinator*

# Transplants

SQUINTING into the early morning sun, I caught a glint of sunshine off the far-off windshield as the helicopter emerged from behind the rocky, steep hillsides of Antelope Island.

"Here they come!" I shouted.

Soon the steady thud of the rotors could be heard, and the aircraft's shape became clear. Our small throng of workers waited expectantly as the pilot banked into a tight turn and set down carefully in a swirl of dust.

Two UDWR biologists approached the aircraft as the right-side door swung open. They reached into the cargo hold and lifted a trussed and blindfolded bighorn sheep clear of the helicopter, placing it on the ground. Soon two additional sheep were set alongside the first. Then the pilot lifted off in search of more sheep.

As soon as the helicopter cleared the landing zone, six volunteers, all members of the Foundation for North American Wild Sheep, hustled to carry the sheep to our work site about a hundred yards away. Each sheep was weighed on a platform scale, its temperature was recorded, and then it was lifted to a nearby tarp where we swarmed around it like a M.A.S.H. team.

Three eight-person crews worked on the sheep simultaneously, each person carrying out a specific task. Within four minutes all of the sheep had tags placed on their ears and radio collars fastened around their necks, their sex had been determined and their age had been estimated by looking at their horns and teeth. Nasal swabs and fecal samples were also collected to monitor their exposure to disease.

**Moving big game takes time, money, expertise and a little luck.**

After receiving injections of antibiotics and vitamins to counteract the stress of the capture, they were brought to the safety of an enclosed stock trailer. It took four to six of us to safely lift and load each sheep into the trailer, first unbuckling the hobbles from the animal's legs and then removing the blindfold from its eyes as it passed through a closely guarded doorway.

We replenished supplies and reorganized the processing area, and then settled in to await the helicopter's return with more live cargo. This scene was repeated many times over a two-day period in January 2006. By the end of the second day, 44 healthy sheep were prepared for shipment to their new home in vacant habitat on the Stansbury Mountains, just west of the towns of Tooele and Grantsville along the southwest shore of the Great Salt Lake.

The 44 sheep would join 12 sheep that were moved to the Stansbury Mountains during a similar transplant effort in December 2005.

Personnel from the UDWR's Northern and Central Regions directed this bighorn sheep transplant, but the project also involved extensive partnerships with other agencies and organizations, including Utah Division of State Parks & Recreation, the U.S. Forest Service, the Bureau of Land Management, Brigham Young University, Utah State University, the Foundation for North American Wild Sheep and Sportsmen for Fish and Wildlife.

The release of bighorn sheep on the Stansbury Mountains is just one example of ongoing work by the UDWR to increase the distribution of big game animals across Utah.

## Spreading wildlife wealth

Why do the UDWR and its partners devote so much time, money and effort to capturing and moving big game?

These majestic animals are an important part of Utah's natural heritage, and we're committed to ensuring that healthy populations of big game animals are maintained to enhance the quality of life that Utahns enjoy. By transplanting a small group of big game animals into unoccupied habitat, we can create a new and thriving population quickly, often within a span of five to 10 years.

Increasing the distribution of wildlife in Utah is part of the UDWR's mission, and we've been very successful in fulfilling this charge through an aggressive transplant program.

## A history of transplants

Almost all of the elk, pronghorn, mountain goat, and bighorn and desert sheep populations found in Utah today are the result of transplants during the last century.

As Utah was settled, most of the state's big game animals became scarce. Some species succumbed to changes in their habitat, and others died because

of exposure to livestock-borne disease. Unregulated hunting also took a toll. Bison disappeared from Utah, and elk and bighorn sheep were extirpated from most of the mountain ranges in Utah.

Over time, conditions changed. Better range management, livestock husbandry and strict controls over hunting resulted in the growth of big game populations, and now we're able to return these species to many of their original ranges. For example, the Henry Mountains bison herd of a few hundred animals, and one of only four free-ranging bison herds on public land in the country, owes its beginning to a transplant of 18 animals purchased from Yellowstone National Park in 1941.

In addition to returning animals to their original ranges, transplants have expanded the distribution of some species, such as mountain goats, to portions of Utah where they were not previously known.

In some cases, the animals have transplanted themselves. Moose expanded their range into Utah in the early 1900s, moving in from Wyoming and Idaho. Pronghorn reentered the state from Wyoming in the 1940s.

Since they became established, we have captured and transplanted moose and pronghorn. Moose distribution has expanded throughout the northern Wasatch and Uinta mountains, and Utah is now home to at least 4,100 moose. About 15,000 pronghorn are also scattered across the state's desert regions.

## Overcoming obstacles

On the surface, transplants might seem simple. In reality, successful transplants are complex and involve considerable research and planning. In Utah, we complete an extensive checklist of requirements before we start our fieldwork. We identify sites that provide the best chance that new populations will survive and grow and reduce the chance that conflicts with other land uses will occur.

Several legal requirements also guide the UDWR's big game transplant process. Most of Utah's big game species are managed under statewide and individual herd unit management plans. These plans are developed with considerable public involvement and review before the Utah Wildlife Board approves them. Each plan includes a list of suitable transplant sites. Before each transplant takes place, the UDWR must consult with the landowners at the proposed release sites, notify local governments and the state's Resources Development Coordinating Committee and gain the approval of the Wildlife Regional Advisory Council in the area and the Utah Wildlife Board.

Transplants also are expensive on a per-animal basis, but if they're done correctly, the benefits of viable, self-supporting populations of big game will last indefinitely. The new population should reproduce and grow following the release, expanding to fill the available habitat.

To be successful, newly transplanted groups of big game animals need to overcome several hazards, including predators, illegal killing, starvation and disease. Young, healthy adult animals are selected for transplant because they're the animals that are best able to adapt to the challenges of being released into unfamiliar habitat, where they must learn the locations of the best forage, water and cover areas.

To give animals the best chance to thrive, we choose release sites with the fewest number of predators. Also, in the case of bighorn sheep, the only moun-

**Below, b**

RON STEWART

tains that are considered are those where domestic sheep or goat are not allowed to graze, reducing the chance of disease in the new population. We also do not want the transplant to create problems for local ranchers—a new population of elk is not appreciated if it results in the local ranches losing income from elk marauding in fields or winter haystacks.

A good source of animals to transplant also must be found. Within Utah, we focus on populations that contain excess animals and are clearly over their management objective, and on situations where hunting opportunity would not be greatly reduced by removing some animals for transplant. For example, the Antelope Island bighorn sheep herd lives within a state park and is not hunted; periodic removal of sheep is required to prevent the population from growing too large.

Utah also works cooperatively with other states and Canadian provinces, and we're often able to trade wildlife species for transplant. We've obtained bighorn sheep from Alberta, British Columbia, Montana, and Nevada, and mountain goats from Washington. In return, Utah has provided sheep, moose and pronghorn to several states.

Additional steps in the transplant process include selecting a capture site that has the proper mix of terrain and access, and determining the best capture method. In most cases, we prefer to capture big game with physical restraint only and reserve the use of immobilizing drugs for special circumstances. Drugs are quite useful, but they can cause the captured animals additional stress and increase the risk that the animals will die.

## The glamorous jobs

Big game capture projects are exciting and are one of the few instances where truly "hands-on" wildlife management takes place. Proper training in handling large animals is critical, for the health and safety of the captured animals and for the people who are working with them. Individual big game species differ in their behavior, their habitat and their reaction

**At right, a helicopter lowers a captured bighorn sheep to a handling area on Antelope Island.**

to pursuit. Our capture efforts have to be tailored accordingly.

Capturing animals using a net gun fired from a helicopter is efficient for species that are difficult to lure into corrals or under drop nets. This method involves using a very small, maneuverable helicopter to chase individual animals at low altitude. Then a tangle net is fired over the animals from a distance measured in feet, not yards.

Firing nets from helicopters is a common way to capture bighorn or desert sheep, moose, mountain goats and bison. Once the animal is tangled in the net, the helicopter lands nearby, and one or two people "mug" the animal, which involves securing its legs in hobbles, blindfolding it and preparing it for transport.

Because helicopter capture requires high-risk, low-level flying, the UDWR contracts with private companies that specialize in this type of work. Our biologists plan and supervise the capture work, but they don't fly in the helicopters. They remain at unloading zones to handle and monitor the animals on solid ground.

Elk are normally captured a different way: in corral traps. This process involves baiting groups of the animals into a large corral and then closing its entrance gate. Individual elk are moved through a chute and loaded into trailers, which is similar to the procedure used to load cattle.

Pronghorn are captured in large drive traps. These traps are made of netting and have long wing fences that extend from a small, circular capture corral. A helicopter is used to locate and herd groups of pronghorn into the trap, and then a gate is used to close the entrance to the trap. Because pronghorn are excitable and fragile, curtains are raised as soon as the animals enter the corral. The temporary wall reduces the pronghorns' visibility and calms them. The captured pronghorn are then released into a nearby capture pen a few at a time, where they are wrangled by hand and are restrained a few minutes for processing. Then they're placed in darkened stock trailers for transport.

Regardless of the way the animals are captured, it usually takes a large crew of workers to ensure the safe handling and transport of these valuable animals. Crews of biologists and volunteers monitor the temperature and condition of captured animals, keep them blindfolded and quiet, and maintain vigilance to prevent the animals from becoming injured. A veterinarian's services are frequently used to make sure each animal gets the best care possible.

### A return to the Stansburys

It was late in the afternoon as our caravan of trucks threaded its way to the base of the hill on the western slope of the Stansbury range. A blanket of snow improved visibility for the small crowd of onlookers assembled below the sheep trailer, which was backed upslope to provide an uphill escape route for the bighorn sheep inside. As the trailer doors flung open, the sheep leaped up the slope. They then slowed to a trot in a single-file line and paused for one last look back before disappearing over the ridgeline.

The Stansbury release resulted in 53 sheep living on the mountain by the end of January 2006. The largest group of bighorn sheep released by the UDWR to date, this effort marked the return of bighorns to the Stansbury Mountains after an absence of nearly 100 years.

Within three months of the release, at least 18 newborn lambs were observed with the ewes, marking early success for this transplant effort. If all goes as expected, Grantsville area residents will soon be catching glimpses of sheep on the mountain, and the Stansbury Mountains herd should be robust enough to support a limited sheep hunt within a decade.

## Turkeys

Wild turkeys existed in Utah before European settlement, but they had vanished by the 1800s. The division and its partners began transplants of birds from eastern states in the 1920s, and birds arrived later from Arizona, Colorado, Texas and other western and Midwestern states. Utah now boasts a population of 18,000 to 20,000 wild turkeys of the Merriam's and Rio Grande subspecies.

## Mule deer

Mule deer are the one species of big game in Utah that are not suited to management through transplants. Although they can be captured readily and transported into new habitats, once released, deer scatter rapidly, traveling long distances from their release sites. Consequently, their survival is low and the desired objective—a new, thriving population near the release site—is not reached.

## Elk

At the end of the 1800s, the distribution of Utah's state animal, the elk, was reduced to a small population in the Uinta Mountains. The first transplant of elk into Utah occurred in 1912, when 10 elk captured in Jackson Hole, Wyoming, were released into Salina Canyon in Sevier County. Over the next three years, 148 additional elk were purchased from Yellowstone National Park. These elk were released in central and northern Utah.

By the fall of 1915, the statewide elk population had grown to an estimated 700 head. By 1923, the elk herd had reached approximately 3,000 to 4,000 head. Utah's first modern elk hunt was held in 1925. Transplants of elk within the state continued, and many areas of Utah have benefited. Utah's elk population has grown to the point that the state has been able to provide elk to other states, most notably Kentucky, through cooperative agreements. Today, about 60,000 elk live in Utah, and about 30,000 hunting permits are issued for this challenging species each fall.

By Kevin Bunnell
*Mammals Program Coordinator*

# Bringing up bears

## A private rehabilitation center is giving orphaned bears a chance for life.

DURING the summer and fall, the Division of Wildlife Resources occasionally picks up bear cubs that have been abandoned or orphaned. Thanks to the efforts of a private rehabilitator, these cubs now have a bright future.

### Going it alone

Several things can cause a black bear cub to become separated from its mother.

In Utah and other dry states, there is a strong correlation between drought and the number of bear cubs that are found abandoned or orphaned. Because of drought, adult females are sometimes forced to abandon their cubs simply because they can't find enough food to feed themselves and also provide for their offspring.

In 2004, Utah experienced below-normal snowfall, a dry spring and a hot, dry summer. The lack of moisture resulted in very little food for the bears, especially in the mountains of eastern Utah. During late summer and early fall, UDWR personnel found 14 bear cubs that had been abandoned by their mothers.

In contrast, above-normal winter and spring moisture in 2005 provided Utah's bears with plenty of food, and no bear cubs were found orphaned or abandoned that year.

### Rehab and release

In 2003, the UDWR instituted a policy for rehabilitating orphaned and abandoned bear cubs.

If a black bear cub is found alone, and UDWR biologists determine that its mother is not going to return, the cub is taken to the Idaho Black Bear Rehabilitation Center (IBBR) in Garden City, Idaho. Operated by wildlife rehabilitator Sally Maughan, the IBBR accepts and rehabilitates cubs from several Western states, including Idaho, Oregon, Utah, Washington and Wyoming. Since the IBBR opened in 1989, the facility has cared for more than 150 bear cubs, most of which have been successfully released back into the wild.

In fall 2004, the 14 bear cubs that were found orphaned or abandoned in Utah (nine males and five females) were taken to the IBBR. After months of successful rehabilitation, the cubs were scheduled for release in the Book Cliffs in June 2005, when the cubs would be more than one year old.

Before their release, all of the cubs were fitted with breakaway radio collars and numbered ear tags. Breakaway col-

**DWR employees prepare to release a rehabilitated bear into the wild.**

**The author holds a small bear that will be turned over to a rehabilitator.**

lars were used because fixed-size collars could become too tight and could constrict the breathing of the young bears as they continued to grow.

The bears also were weighed. All of the males (averaging 183 pounds) and the females (averaging 94 pounds) were significantly larger than yearling bears would be in the wild, which was probably due to the unlimited food available to them at the IBBR. This extra fat provided the bears with important energy reserves that would ease their transition when they were released into their new and unfamiliar surroundings.

The UDWR and Brigham Young University have worked together to determine the success of the IBBR's rehabilitation program by studying how the cubs became acclimated after being released into natural, but unfamiliar, habitat.

On June 2, 2005, the bears were released at two locations in East Canyon in the southeast portion of the Book Cliffs. The bears were let out of their traps two at a time. Most of the bears quickly disappeared into the brush surrounding the release site, but a few climbed nearby trees.

After the release, Josh Heward of BYU monitored the bears on a weekly basis, using radio-telemetry on the ground and from an airplane. He found that the bears quickly adjusted to their natural setting and began to disperse from the release site by the middle of June. Shortly after they were released, the bears also began finding and eating natural foods. Heward found evidence of the bears feeding on insects, grass, berries and meat as he monitored them through the summer.

Twelve of the 14 bears survived through the summer and fall in the Book Cliffs. One of the bears that did not survive was found on August 1 near a highway just south of the Douglas Pass in Colorado. An autopsy found no broken bones, so it's unlikely that the bear died from a collision with a vehicle. Its cause of death is unknown.

The second bear was taken by a hunter in late August.

Of the 12 surviving bears, two males dispersed more than 50 miles into Colorado, and the collars on four of the bears broke away before the bears entered their dens for the winter. These six bears are no longer being tracked.

## Thriving in the wild

Five of the remaining bears were visited in their dens in March 2006 to assess their condition and to place fixed-size collars on the females. All of the bears were in great condition, and one of the females even tipped the scales at an amazing 187 pounds! Adult females visited in dens in March usually weigh about 150 pounds.

The good condition and weight of the bears indicated that the forage available in the Book Cliffs in summer 2005 was outstanding, which is what biologists expected with the above-average moisture.

The great condition of the bears also showed that they were able to successfully acclimate and find food in a natural environment. In addition, despite spending several months close to people at the IBBR, there was very little evidence that the released bears were habituated to people, and none of the bears that were tracked over the summer were involved in nuisance situations.

The overall success of this rehabilitation and release provides strong reasons for continuing the bear cub rehabilitation program. In the future, rehabilitated young bears may be used to augment low-density bear populations or even to reestablish bears in areas that have suitable habitat but are currently unoccupied.

As for the surviving bears that were released in June 2005, researchers from BYU will continue to track the female bears for two to three years and will visit them in their winter dens to monitor their health and reproductive capacity.

## You can help

The IBBR provides an invaluable service by rehabilitating bear cubs in a way that allows them to successfully acclimate to their natural habitat. The facility operates solely on private donations.

You can contribute to the IBBR by visiting their Web site at *www.bearrehab.org.*

By Jill West
*Coordinator of Volunteers*

# Dedicated to the land

SINCE LAST SPRING, members of Utah's Dedicated Hunter program and other volunteers have been working side-by-side with UDWR personnel to improve wildlife habitat across the state. Volunteers are a critical part of programs that maintain, improve and create wildlife habitat in Utah.

Every year, volunteers multiply the manpower available for wildlife habitat and conservation projects in the state, working more hours than 30 additional full-time paid employees would work.

And the UDWR wants to add *you* to that growing list of volunteers. Habitat priorities vary by region and by year, but plenty of opportunities always are available to get involved in a habitat project close to your home or your favorite hunting spot.

The following are examples of wildlife habitat projects that volunteers helped complete in 2006:

## Southern Region

*Jason Nicholes, Wildlife Biologist*

Dedicated hunters continue to help UDWR habitat programs in southern Utah by thinning pinyon and juniper trees on mule deer winter ranges. Pinyon and juniper crowd out shrubs, such as bitterbrush and sagebrush, that provide high-quality food for big game animals. Removing the pinyon and juniper trees makes space for these high-quality food plants and creates the conditions that help deer herds grow.

**Dedicated hunters and other volunteers help improve Utah's wildlife habitat.**

Since 2000, dedicated hunters and other volunteers have become better at removing pinyon and juniper trees, clearing more acres more efficiently every year. New parcels of land were tackled in 2006, and more ambitious goals were set for the number of acres to be cleared.

## Central Region

*Dale Liechty, Volunteer Services Coordinator*
*Mark Farmer, Habitat Manager*

While plants are being removed to improve wildlife habitat in some areas of the state, at one UDWR wildlife management area in central Utah, just the opposite it happening—shrub seedlings are being planted to improve habitat.

This past spring the UDWR and dedicated hunters planted 3,000 bitterbrush seedlings on the Wallsburg Wildlife Management Area (WMA), located just south of Heber City. During the next few years, several thousand sagebrush and bitterbrush seedlings will be planted on more than 500 acres on the WMA. These plants will improve the WMA's mule deer winter range.

About 30 to 40 volunteers are needed each spring to help with planting. If you're interested in helping, check online at *wildlife.utah.gov/dh/cr.php* or contact Dale Liechty, the Central Region Volunteer Services Coordinator, at *daleliechty@utah.gov*.

## Southeastern Region

*Brent Stettler, Outreach Manager*

Since 1997, the UDWR and its partners have been working hard to restore sagebrush in critical Gunnison sage-grouse habitat in San Juan County.

Since the time that pioneers settled the area, agricultural practices have reduced or even eliminated sagebrush on vast areas of land that are critical to the survival of the Gunnison sage-grouse. Utah has named the Gunnison sage-grouse a sensitive species, and the bird also is a potential candidate for listing as threatened or endangered under the federal Endangered Species Act.

Together with other volunteers and alongside UDWR personnel, dedicated hunters have collected sagebrush seed from the local area, hand-planted sagebrush seedlings, dug in mature plants and operated tractors and planting equipment. During the 10 years that the project has been underway, several hundred thousand plants have been tucked into the soil in carefully selected areas. As the plants mature and bear seed, biologists hope that wind and rain will disperse the sagebrush seed over larger and larger areas, leading to the eventual restoration of a sagebrush-steppe community capable of supporting a stable or growing population of Gunnison sage-grouse.

**A UDWR volunteer helps plant seedlings in a wildlife habitat project.**

## Northern Region

*Jodie Anderson, Volunteer Services Coordinator*
*Dan Christensen, Hardware Ranch*

Dedicated hunters and other UDWR volunteers have been involved in several projects in northern Utah. One of those projects involved building a buck-and-pole fence to protect streamside areas from livestock.

Close to 60 dedicated hunters worked with the U.S. Forest Service on this joint project to protect fragile stream habitat from the disturbance caused by livestock walking and wallowing in streams. In some cases, poles and equipment had to be carried into the building site, but the hard work will pay off by creating better fishing downstream.

At the Hardware Ranch WMA, a water development project sponsored by a generous grant from the Mule Deer Foundation was in full swing this summer. The goal of the project is to reduce the number of deer killed on SR-101 in Blacksmith Fork Canyon.

Habitat biologists and volunteers created several ponds, harnessed several springs and ran about five miles of pipe down the bench in Blacksmith Fork Canyon. The pipe will feed a trough system that will provide mule deer with water in areas away from the road. Nearly a hundred volunteers from Back Country Horsemen helped carry and install the troughs.

A five-year stream relocation and enhancement project also was completed on Curtis Creek this year. The creek flows through the Hardware Ranch WMA.

Three major Eagle Scout projects, which helped develop a mile-long nature trail along the creek, contributed to the project's success. This nature trail will add to the attractions at the Hardware Ranch WMA, which is already known for its off-highway vehicle trails and winter elk viewing.

## Northeastern Region

*Ron Stewart, Outreach Manager*

In 2003 and 2004, dedicated hunters had the chance to participate in an experimental volunteer project in Rabbit Gulch. They downloaded maps and information from the UDWR Web site and obtained a volunteer timesheet from the UDWR. The dedicated hunters were then allowed to choose a site within a designated area in Rabbit Gulch and begin work at thinning pinyon and juniper trees at their convenience.

This project has been popular with dedicated hunters in the Uintah Basin and along the Wasatch Front. Volunteers can work as many hours as they choose, and they can create their own schedule. To document their productivity, volunteers submit before and after photos of the site they're working at.

This project has cleared 300 acres of pinyon and juniper trees in the western portion of Rabbit Gulch. In 2006, UDWR habitat biologists directed volunteers to start working in the eastern and southeastern portions of Rabbit Gulch. Volunteers started cutting pinyon and juniper trees in mid-April and will continue their work through the rifle deer hunt in October.

If you're interested in this unsupervised project, instruction packets are available on the conservation project Web site at *wildlife.utah.gov/dh/projects.php* at the Northeastern Region portion of the site.

## How *you* can get involved

If you're interested in learning more about wildlife management in Utah, meeting other wildlife enthusiasts and making a difference for the state's wildlife, volunteering on a UDWR habitat project might be just what you're looking for.

To view current volunteer opportunities, visit *wildlife.utah.gov/dh/projects.php* on the Web. New volunteer projects are posted all the time, so check the site often.

If you're a college student, or you know a college student who is interested in learning about wildlife management, some internship projects available through the UDWR might be of interest. The internships are generally unpaid positions that focus on giving the intern a valuable, career-building experience. To learn more, contact Jill West in the UDWR's Salt Lake City office at *JillWest@utah.gov* or call your nearest UDWR regional office.

## Reminder for dedicated hunters

Remember to return your unused 2006 buck deer tags to the UDWR by Jan. 31, 2007 to avoid being credited with a harvest. Send unused tags to: Attn: Dedicated Hunter Program, P.O. Box 146301, Salt Lake City, Utah, 84114-6301.

## CONTACT INFORMATION

Salt Lake City Office
1594 West North Temple
PO Box 146301, Salt Lake City, Utah 84114-6301
(801) 538-4700

Central Region Office
1115 North Main Street, Springville, Utah 84663
(801) 491-5678

Northern Region Office
515 East 5300 South, Ogden, Utah 84405
(801) 476-2740

Northeastern Region Office
152 East 100 North, Vernal, Utah 84078
(435) 781-9453

Southeastern Region Office
475 West Price River Drive, Suite C, Price, Utah 84501
(435) 636-0260

Southern Region Office
1470 North Airport Road
PO Box 606, Cedar City, Utah 84721-0606
(435) 865-6100

Poaching hotline: 1 (800) 662-DEER

Web site address: wildlife.utah.gov

STATE OF UTAH
NATURAL RESOURCES
Division of Wildlife Resources

STATE OF UTAH
NATURAL RESOURCES
Division of Wildlife Resources

PRSRT STD
U.S. POSTAGE
**PAID**
SALT LAKE CITY, UT
PERMIT NO. 4621


*Take me fishing*
*Because my wedding will*
*be sooner than you think.*

# "take me fishing"

Purchase your new 365-day fishing license online
at wildlife.utah.gov or from participating retail outlets.